# PROCEEDINGS

OF THE

# BIOLOGICAL SOCIETY OF WASHINGTON

## FOUR NEW CHINESE MAMMALS.

BY GERRIT S. MILLER, JR.

[By permission of the Secretary of the Smithsonian Institution.]

Among some Chinese mammals collected by Mr. Arthur de C. Sowerby and presented to the United States National Museum are representatives of four that have not hitherto been described. They were taken in the provinces of Kansu and Shansi, northwest China.

### Eptesicus serotinus pallens subsp. nov.

Type.—Adult male (skin and skull) No. 155,156, U. S. National Museum. Collected at Ch'eng-yuan-hsien, 70 miles west of Ch'ing-yang-fu, Kansu, China, August 4, 1909, by Arthur de C. Sowerby. Original number 246.

Diagnosis.—In general like the European Eptesicus serotinus serotinus but color somewhat less dark, particularly below, the contrast between that of dorsal and ventral surfaces evident enough to produce a slight line of demarcation along side of neck; forearm shorter than in true serotinus; skull tending to be rather short and broad.

Measurements.—Type: head and body, 70; tail, 50; tibia, 22; foot, 13.8; forearm, 49; thumb, 10.6; third finger, 90; fifth finger, 65; ear, 19. Skull: condylobasal length, 19.0; zygomatic breadth, 14.0; interorbital constriction, 4.6; breadth of braincase, 9.6; mandible, 15; maxillary toothrow exclusive of incisors, 7.2; mandibular toothrow exclusive of incisors, 8.2.

Specimens examined.—Four, from the following localities: Ch'eng-yuan-hsien, 70 miles west of Ch'ing-yang-fu, Kansu (altitude 4,000 feet), 1; 18 miles east of Ku-yuan-chow, Kansu (altitude 5,300 feet), 1; 80 miles southwest of Yen-an-fu, Shensi (altitude 3,500 feet), 2.

# Microtus pullus sp. nov.

Type.—Adult male (skin and skull) No. 155,047, U.S. National Museum. Collected at Chiao Ch'eng Shan, 90 miles west of Tai Yuan Fu, Shansi, China (altitude 7,000 feet), October 11, 1908, by Arthur de C. Sowerby. Original number 32.

Diagnosis.—Size and general characters as in Microtus (Phromys) johannes Thomas, but color dark, the general effect approaching marsbrown instead of dull ochraceons-buff.

Color.—Upperparts a uniform fine grizzle of cream-buff and black with a distinct brownish wash on crown and along middle of back, the general effect suggesting Ridgway's mars-brown and not in the least resembling the pallid ochraceous-buff of *Microtus johannes*. Sides not so dark as back, the grizzling less evident. Underparts light cream-buff much clouded by the blackish-slate under color. Feet dull buffy white with an evident brownish wash. Tail whitish below, brownish above, not sharply bicolor.

Skull and teeth.—The skull and teeth do not differ appreciably from those of Microtus johannes. They are conspicuously smaller than in M. mandarinus.

Measurements.—Type: head and body, 104; tail, 18; hind foot without claws, 15.5; ear, 9. Skull: condylobasal length, 24.8 (27.4)\* zygomatic breadth, 16.2 (17.8); interorbital constriction, 3.6 (4.0); occipital breadth, 13.0 (13.0); occipital depth, 7.0 (7.2); nasal, 6.2 (7.0) diastema, 7.8 (9.2); mandible, 16.4 (18.2); maxillary toothrow, 5.8 (6.4); mandibular toothrow, 5.8 (6.4).

Specimens examined.—Four, all from the type locality.

## Allactaga mongolica longior subsp. nov.

Type.—Adult female (skin and skull) No. 155,183, U. S. National Museum. Collected 15 miles northeast of Ching-ning-chow, Kansu, China. Altitude 6,200 feet, July 26, 1909, by Arthur de C. Sowerby. Original number 204.

Diagnosis.—Similar to true Allactaga mongolica (Pallas), but ear and hind foot longer, and audital bulke larger.

Measurements.—Type: head and body, 150; tail, 230; hind foot without claws, 76. Skull: condylobasal length, 38.4; zygomatic breadth, 26.0; interorbital constriction, 11.4; breadth of braincase, 19.8; depth of braincase at middle, 13.6; nasal (median), 15.4; diastema, 12.6; mandible, 24.8; maxillary toothrow, alveoli, 8.0; mandibular toothrow, alveoli, 7.8.

Specimens examined.—Twelve, all from the type locality.

#### Ochotona annectens sp. nov.

Type.—Adult male (skin and skull) No. 155,164, U.S. National Museum. Collected 15 miles northeast of Ching-ning-chow, Kansu, China (altitude 6,200 feet, July 27, 1909, by Arthur de C. Sowerby. Original number 225.

Diagnosis.—Similar to Ochotona dauurica (Pallas) from the Mongolian Plateau, but dorsal outline of skull less convex and audital bullæ slightly larger. Differs from O. bedfordi Thomas, of Shensi, and Shansi, China, in smaller size (particularly of skull) more convex upper cranial outline, and much smaller audital bullæ.

<sup>\*</sup> Measurements in parenthesis are those of an adult male *Microtus mandarinus* from the vicinity of Tai-yuan-fu, Shansi.

Color.—As in the related species the general color is a light buff darkened by a plentiful sprinkling of black hair-tips, the buff everywhere predominating, and becoming clearer and more yellowish along sides, particularly in region of shoulder. A faintly indicated pale area between ears. Underparts and feet dull white with a slight buffy tinge; throat crossed by a broad band of dull buff, this area sometimes extending backward along median line. Ear with the usual dark marking on outer side.

Measurements.—Type: head and body, 181; hind foot, 29 (26); ear, 20. Skull: condylobasal length, 40.0 (42.4);\* zygomatic breadth, 20.4 (21.2); interorbital constriction, 4.2 (4.2); postorbital constriction, 13.2 (13.8); mastoid breadth including bulke, 20.8 (22.0); depth of braincase at middle, 11.0 (11.4); nasal, 15.0 (15.0); diastema, 9.8 (10.8). mandible, 27.2 (30.2); maxillary toothrow, alveoli, 7.4 (8.6); mandibular toothrow, alveoli, 7.4 (8.4).

Specimens examined.—Seven; six from the type locality and one from Tsai-chiah-tsuei, 116 miles east of Lanchow, Kansu (altitude 6,300 feet).

<sup>\*</sup> Measurements in parenthesis are those of an adult male Ochotona bedfordi from Wu-tsai, Shansi, China (No. 172,601).